



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,020	07/30/2003	Matthew Crewe	DYOUNG0253US	7762
23908 7590 11/30/2007 RENNER OTTO BOISSELLE & SKLAR, LLP 1621 EUCLID AVENUE NINETEENTH FLOOR CLEVELAND, OH 44115			EXAMINER WHIPPLE, BRIAN P	
			ART UNIT 2152	PAPER NUMBER
			MAIL DATE 11/30/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/630,020	Applicant(s) CREWE, MATTHEW	
	Examiner Brian P. Whipple	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-19 are pending in this application and presented for examination.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the providing of a first version of the application contained in a high-level software component; providing of a second version of the application contained in a plurality of lower-level software components; and allowing the integrator to decide between the use of the different versions (for claims 14) as well steps in dependent claims such as the glue bridge (claim 8), the high-level software component being operable to function as a model component in a model-view-controller software architecture (claim 15), the relationship of lower-level software components to underlying technical functions of the application (claim 17), and the providing of third and fourth versions of the application in intermediate-level software components and software components of a different level respectively (claims 18 and 19) must be shown or the feature(s) canceled from the claim(s). Applicant should also ensure that all features of claims 1-19 are present in the drawings, as an exhaustive list has not been given due to the large number of features missing from the drawings. Additionally, the Applicant is advised that

Art Unit: 2152

the figures seem to be primarily directed to structure and that the method claims are inadequately shown in the figures. No new matter should be entered.

3. The drawings are objected to because multiple parts are not labeled with reference numbers. For example, claims 2-5 show an intermediate system between file archive 20 and workstation 16. The PACS element is merely labeled as 30 in figure 2. However, figures 2-5 show a number of constitute parts in PACS element 30 that are not labeled. Figure 6 fails to include any reference numbers.
4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as

Art Unit: 2152

either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities: abbreviations should be defined initially. For example, figure 1 includes CT scanner 8, MR imager 10, a DR device 12, and a CR device 14. The meaning of DR device and CR device in particular is not clear to the examiner. The examiner has found multiple definitions for DR and CR in a search for definitions. The ambiguity of the terms makes it more difficult to conduct a prior art search.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2152

7. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. As to claim 1, ln. 2-3, claim 6, ln. 3, and claim 15, ln. 2-3, the meaning of “a model component in a model-view-controller software architecture” is unclear. The examiner is unable to determine the meaning through the specification. Clarification is requested for the purposes of future examination.

9. As to claim 5, ln. 1-2, the phrase “the user input parameters” lacks antecedent basis.

10. As to claim 8, the meaning of “glue bridge” is unclear. The examiner is unable to determine the meaning through the specification. Clarification is requested for the purposes of future examination.

Additionally, the use of “operable” renders the claim indefinite as discussed above for claim 15.

11. As to claims 8-12, the meaning of “non-standard” is vague and indefinite. The term “non-standard” is a relative term which renders the claim indefinite. The term is not defined

Art Unit: 2152

by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 101

12. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

13. Claims 1-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

14. As to claims 1-5, a software component fails to fall into any of the four statutory classes of invention: process, machine, manufacture, or composition of matter.

15. As to claims 6-13, a PACS network including a software component fails to fall into any of the four statutory classes of invention: process, machine, manufacture, or composition of matter. The PACS network is not defined in terms of any concrete structure and may be interpreted as consisting merely of software components and/or other logical definitions.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandt et al. (Brandt), U.S. Patent No. 5,875,327, in view of Cooke, Jr. et al. (Cooke), U.S. Patent No. 6,574,629 B1.

18. As to claim 14, Brandt discloses a method of offering an application to a network integrator (Fig. 1, item 28; Fig. 3; Fig. 7, item 29; Abstract, ln. 5-12; Col. 6, ln. 10-15), the method comprising:

providing a first version of the application contained in a high-level software component (Fig. 2; Col. 9, ln. 9-14);

providing a second version of the application contained in a plurality of lower-level software components (Fig. 2; Col. 9, ln. 9-14); and

allowing the integrator to decide between use of the different versions (Col. 2, ln. 58 – Col. 3, ln. 5) for integrating the application into a network (Col. 3, ln. 9-15).

Brandt is silent on the application being a medical-imaging data visualization application and the network being a PACS network.

However, Brandt's teachings are directed to a general network and the advantages of Brandt's teachings apply as well to a PACS network as they do a generic network. Namely, Brandt's teachings of integration of applications provides for the removal of conflicts (Col. 2, ln. 65 – Col. 3, ln. 5) and the ability for an administrator or central authority to determine the preferences and/or settings of other systems when desired (Col. 9, ln. 14-25) are advantageous regardless of network type.

Also, Cooke discloses the application being a medical-imaging data visualization application (Abstract; Col. 7, ln. 49-54) and the network being a PACS network (Col. 7, ln. 30-34).

The advantage of the application being a medical-imaging data visualization application and the network being a PACS network is that medical images may be shared and viewed across a local or wide area network (Cooke: Col. 1, ln. 16-38).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Brandt by including a medical-imaging data visualization application and a PACS network as taught by Cooke in order to gain the above-mentioned advantage.

19. As to claim 15, Brandt and Cooke disclose the invention substantially as in parent claim 14, including the high-level software component is operable to function as a model component in a model-view-controller software architecture (Brandt: Fig. 2; Col. 9, ln. 9-25), and has an interface having a set of user interface control parameters (Brandt: Col. 9, ln. 18-21) and a set of data handling parameters (Brandt: Col. 5, ln. 45-48).

20. As to claim 16, Brandt and Cooke disclose the invention substantially as in parent claim 15, including the data handling parameters are DICOM format data handling parameters (Brandt: Col. 5, ln. 45-48; Cooke: Col. 7, ln. 30-34).

21. As to claim 17, Brandt and Cooke disclose the invention substantially as in parent claim 14, including at least a subset of the lower-level software components relate to underlying technical functions of the application (Brandt: Col. 5, ln. 45-55).

22. As to claim 18, Brandt and Cooke disclose the invention substantially as in parent claim 14, including providing a third version of the application contained in a plurality of intermediate-level software components (Brandt: Fig. 2).

23. As to claim 19, Brandt and Cooke disclose the invention substantially as in parent claim 18, including providing at least a fourth version of the application contained in a plurality of software components of a different level (Brandt: Fig. 2).

24. As to claims 1 and 6, the claims are rejected for the same reasons as claims 14-15 above.

25. As to claims 2 and 7, the claims are rejected for the same reasons as claim 16 above.

26. As to claim 3, Brandt and Cooke disclose the invention substantially as in parent claim 1, including the software component is a sub-component of a pre-existing data visualization application (Brandt: Fig. 2; Col. 9, ln. 9-14; Cooke: Abstract; Col. 7, ln. 49-54).

27. As to claim 4, Brandt and Cooke disclose the invention substantially as in parent claim 3, including the software component includes a software wrapper, the software wrapper being configured to map the sets of parameters of the interface to parameters appropriate for the sub-component (Brandt: Col. 9, ln. 9-25).

Art Unit: 2152

28. As to claim 5, Brandt and Cooke disclose the invention substantially as in parent claim 1, including the user input parameters include preset parameters (Brandt: Col. 9, ln. 18-21).

29. As to claim 8, Brandt and Cooke disclose the invention substantially as in parent claim 6, including the PACS network including a specific glue bridge software component, the specific glue bridge being operable to accommodate non-standard aspects of the PACS network (Brandt: Col. 4, ln. 43-55).

30. As to claim 9, Brandt and Cooke disclose the invention substantially as in parent claim 8, including the non-standard aspect of the PACS network include a non-standard data format (Brandt: Col. 4, ln. 43-55; Col. 5, ln. 45-55).

31. As to claim 10, Brandt and Cooke disclose the invention substantially as in parent claim 9, including the non-standard data format is a compressed data format (Brandt: Col. 5, ln. 45-55; Cooke: Col. 13, ln. 61 – Col. 14, ln. 4).

32. As to claim 11, the claim is rejected for the same reasons as claim 9 above.

Art Unit: 2152

33. As to claim 12, Brandt and Cooke disclose the invention substantially as in parent claim 11; including the non-standard data handling relates to proprietary grouping of data (Col. 1, ln. 39-44).

34. As to claim 13, Brandt and Cooke disclose the invention substantially as in parent claim 6, including the PACS network including a dispatcher software component, the dispatcher being operable to link multiple software components corresponding to multiple software applications to the PACS network via a common interface (Brandt: Fig. 1-2; Cooke: Fig. 1).

Conclusion

35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Whipple whose telephone number is (571) 270-1244. The examiner can normally be reached on Mon-Fri (8:30 AM to 5:00 PM EST).

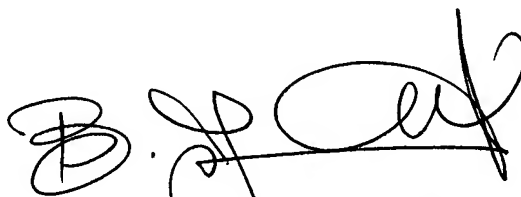
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2152

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BPW

Brian P. Whipple
11/29/07


BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER

11/28/17